FTP

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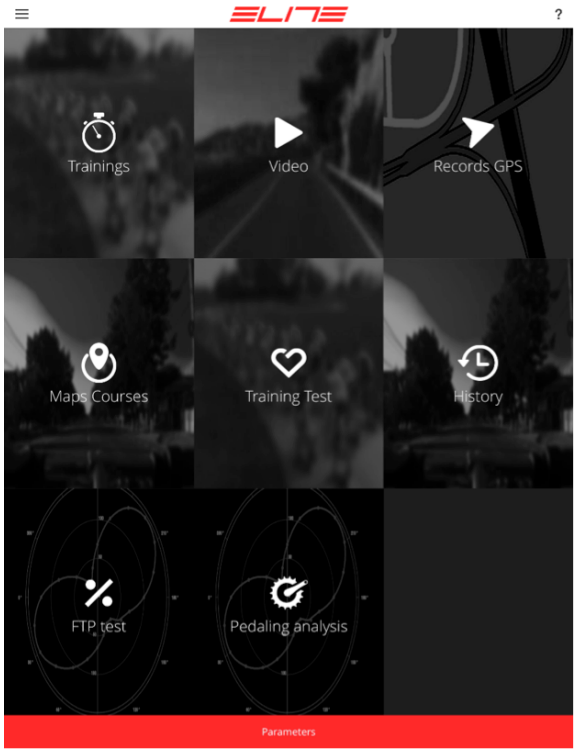

WHAT IS FTP?

FTP is the acronym for **Functional Threshold Power**.
By definition, FTP is the maximum power output, expressed in Watts, that a cyclist can sustain for an hour-long training session.
FTP is considered to be cycling's most objective parameter to determine training zones and monitor progress, maximising the watts recorded by the power meter.

The new release of the myETraining software lets you conduct the **FTP test** directly from the software, thus creating **structured training programs** with the aim of increasing the power threshold you can maintain, session after session.

WHAT'S THE PURPOSE OF THE FTP?

Anybody conducting structured workouts knows how important it is to train with **specific programs** based on concrete and objective data, and to monitor **progress over time** by employing increasingly advanced technologies that can help you make sense of all these parameters.

With the FTP test, myETraining lets you calculate the power threshold you can maintain, so you have a basis on which to start working on and improving your performances over time. You can create training sessions based on your FTP value and improve your cycling profile with effective sessions based on the power value measured in watts, a **scientific and objective** value.

THE TEST

Many protocols have been developed to obtain an accurate FTP value. Elite implements the most qualified protocol, which includes many warm-up and recovery phases, directed towards preparing the cyclist for the **20 minutes intense effort** that calculates the FTP.

To perform the test, no special accessories or equipment are required other than the trainer, the bicycle and the heart rate belt to monitor the heart rate during the different phases of the test.

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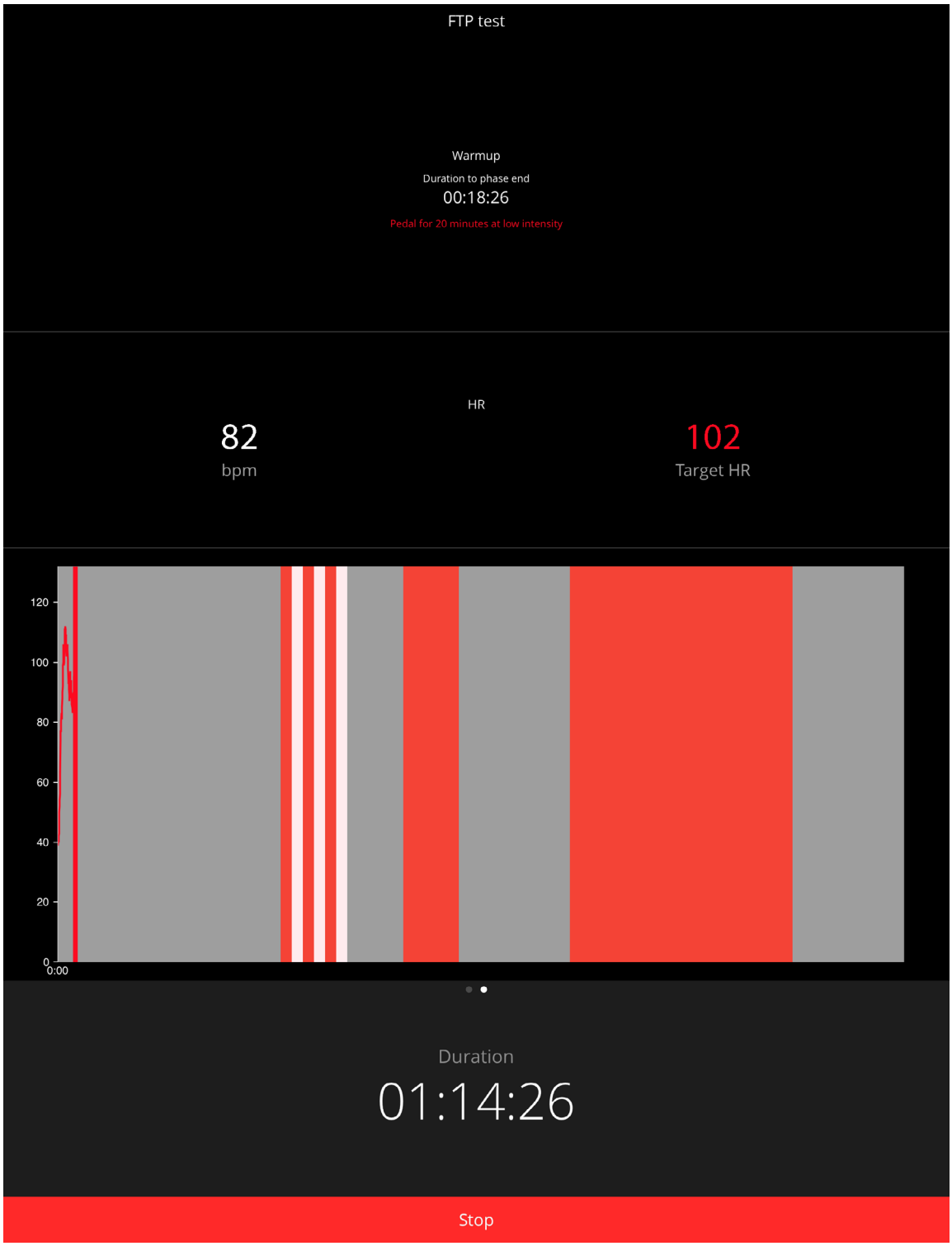
BEGINNING THE TEST

After a moderately intense initial warm up phase, the training session continues with 3 maximum effort 1-minute long repeats and 1 minute-long slow recovery phase, followed by 5 more minutes of low intensity recovery.

The main screen displays a graph with all the **phases of the test** while conducting it, including the recommended heart rates in the more intense workout phases.
The software instantly monitors cyclists' data by displaying wattage power output and cadence through the various phases of the test.

Initial moderately intense warm up with two available screens



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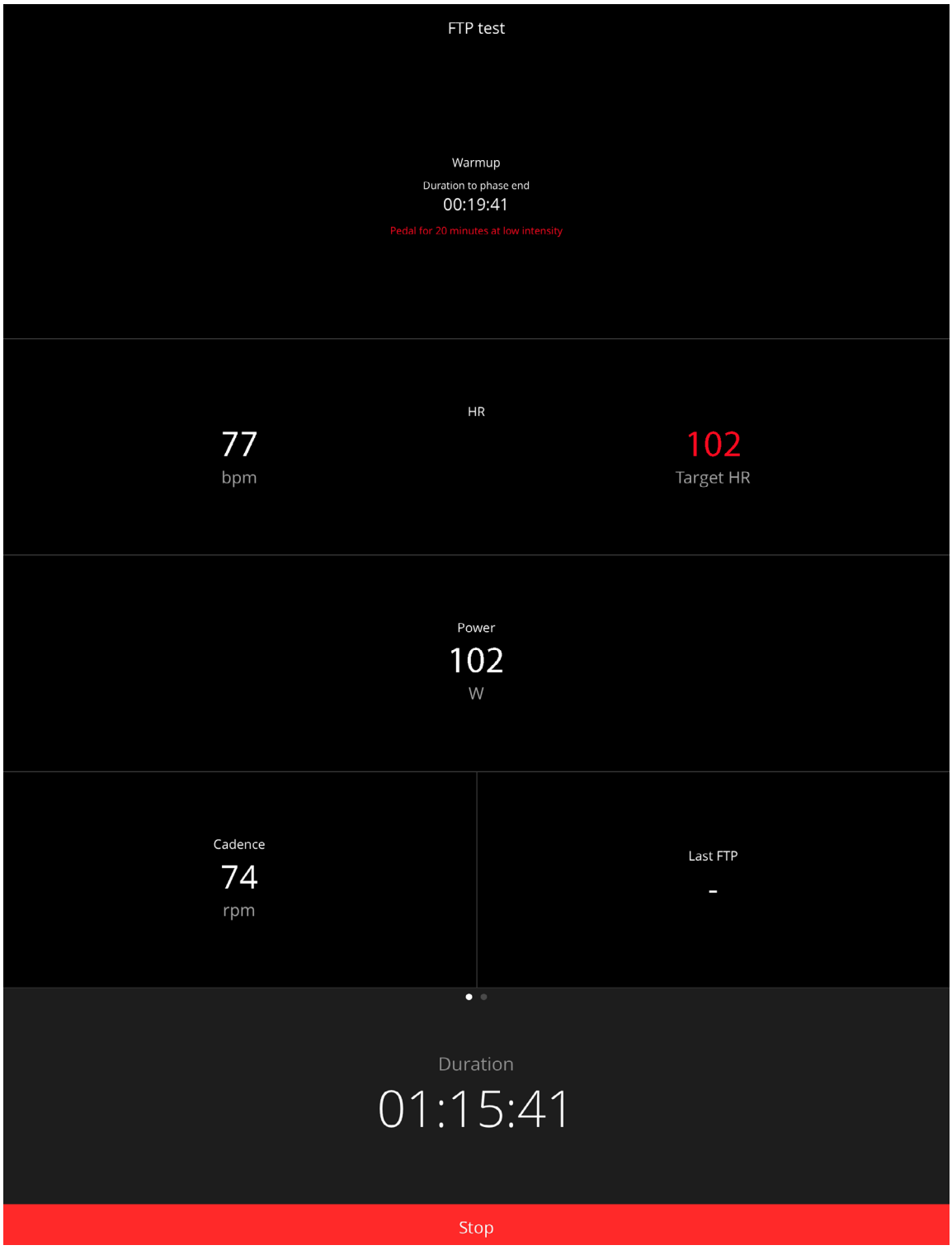
Initial moderately intense warm up with two available screens



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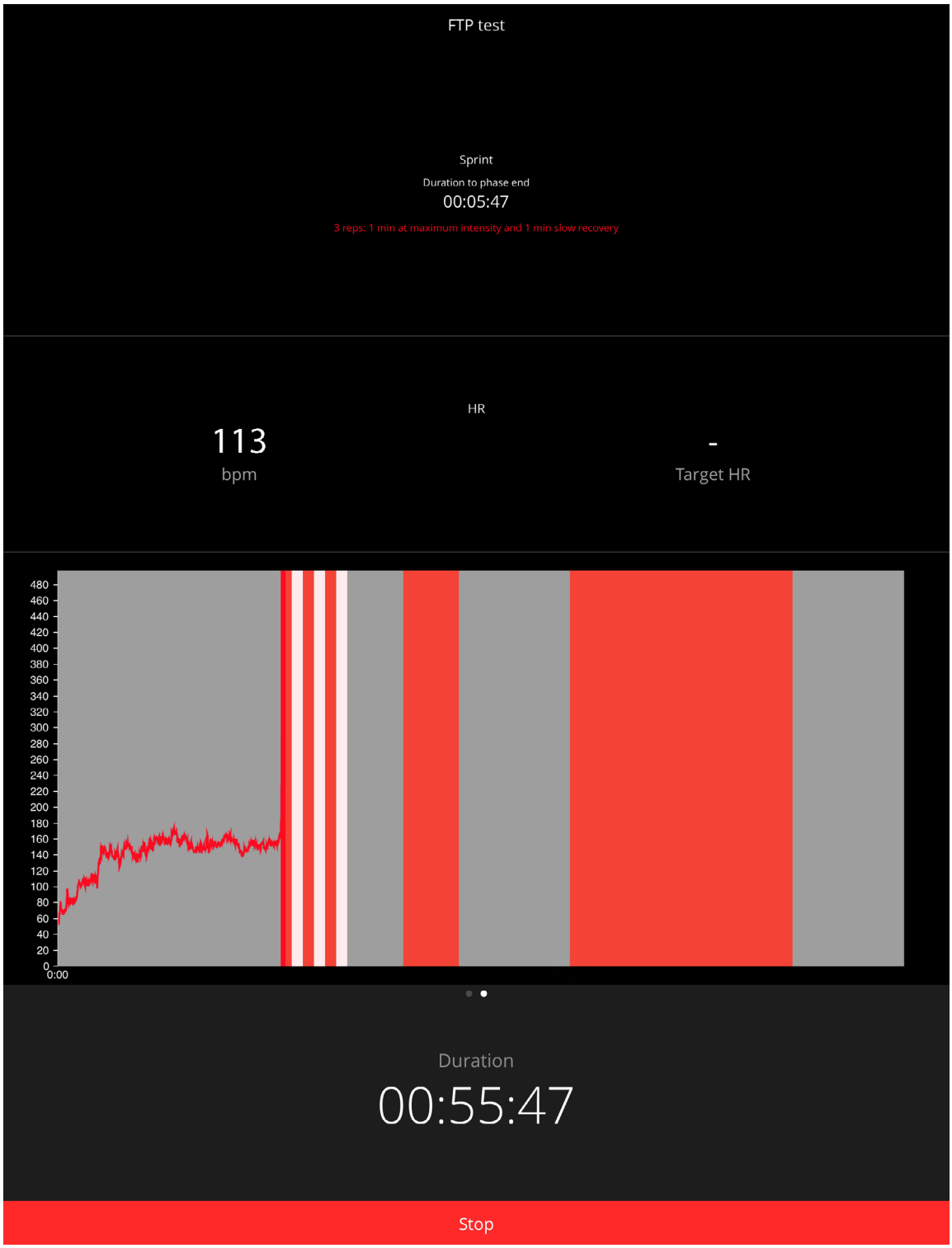
One of the three repeats to conduct at maximum effort



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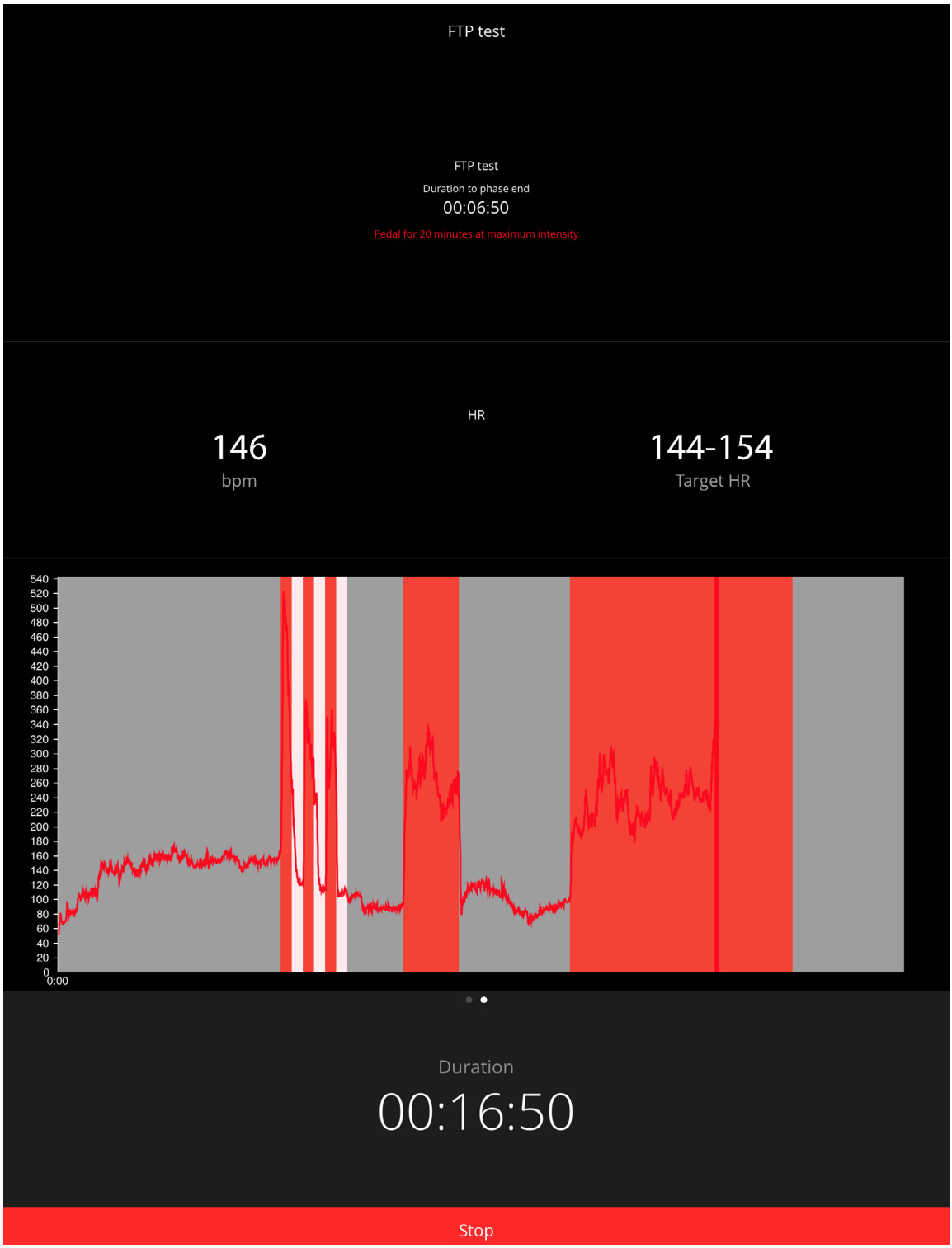
That's how the **phase 1** of the test begins, involving 5 minutes of intense pedalling followed by 10 minutes of low intensity recovery. Once that's done with, you'll be ready for the **proper test**, to be conducted at max power for 20 minutes.

It is important, however, to make sure that the power output is **proportional to the effort to conduct throughout all the workout phases**. The goal is to obtain the highest average power value throughout the whole 20 minutes segment, as steadily as possible.

There are 15 more cool-down minutes after this phase, then the software will calculate the functional threshold power, displaying the data and automatically saving it in the Parameters section of your profile.

The FTP test



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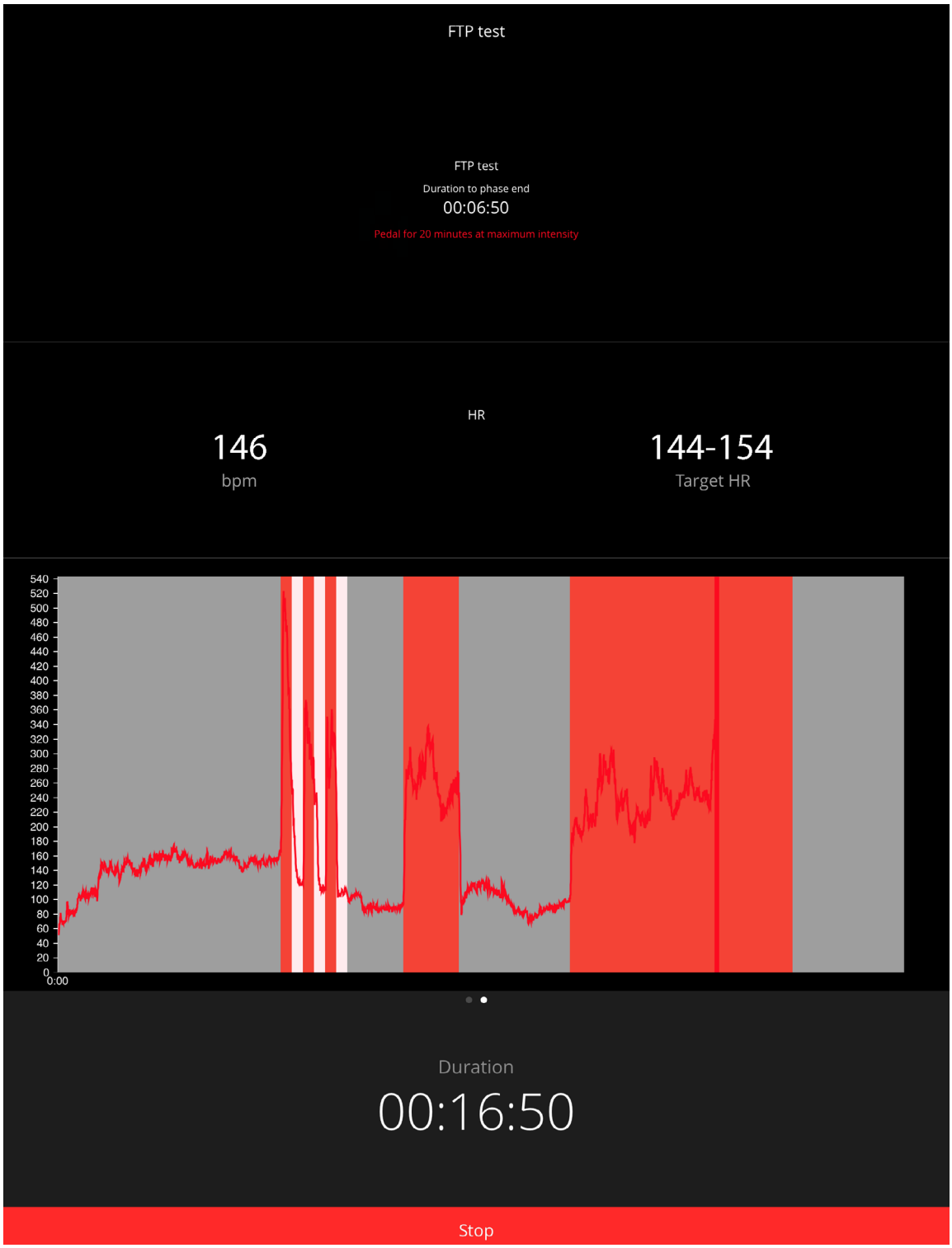
The software clearly indicates the name of the test phase you're conducting, the remaining time, instant cyclist data, heart rate and, if you've already conducted the test before, the latest recorded FTP value.

PLEASE NOTE: FTP value can be manually inserted in the parameters.

FTP value calculated on the data recorded by the software



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PLAN TRAINING SESSIONS WITH FTP

The FTP value lets you have a real time evaluation of your cycling profile.

You can identify **power zones** with this data, so you can manage your training sessions in a structured way and constantly improve your performances.

The goal is to increase the power threshold percentage over time, test by test, as a result of balanced and effective workouts.

There are **7** widely recognized power zones:

- ZONE 1
  Active recovery, <55% FTP.
  It is mainly used for cooling down after intense training sessions or competitions, or during the recovery phases between workouts.

- ZONE 2
  Resistance, 56-75% FTP.
  Aimed at improving general aerobic conditions, so it's usually associated with longer training sessions.

- ZONE 3
  Time, 76-90% FTP.
  It's a moderately intense training zone, used to stabilize performances and prepare your body for more intense training sessions.

- ZONE 4
  Anaerobic threshold, 91-105% FTP.
  This is designed to increase the functional threshold power.
  These are definitely the more challenging workouts.

- ZONE 5
  VO2 Max, 103-120% FTP.
  These are shorter training sessions aimed at improving max oxygen consumption.

- ZONE 6
  Anaerobic capacity, 121-150% FTP.
  These are aimed at improving anaerobic capacity and tolerance to lactic acid.
  These are usually very intense and short workouts.

- ZONE 7
  Neuromuscular power >150 FTP.
  These usually last only a few seconds as they're conducted at the highest intensity level. As the name suggests, the goal is to improve the neuromuscular system, all the while stimulating the metabolic system.

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CREATING TRAINING PLANS WITH THE FTP VALUE

By calculating the various power zones, the FTP value lets you have an important starting point to create structured training sessions.

The **FTP workouts** calculate the power to develop during the training session, in function of the FTP value recorded in the parameters. This is how the FTP based programs will always have an intensity that's proportional to the latest FTP value on the cyclist profile.

Example of a training program based on the FTP value